BRAND ENGINEERING FOR FERMENT NATION ID’S HAKKO KOMBUCHA IN INDONESIA BASED ON PORTFOLIO ANALYSIS OF BOSTON CONSULTING GROUP MATRIX

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BOGOR
2016
DECLARATION

I certify that this thesis entitled “Brand Engineering for Ferment Nation ID’s Hakko Kombucha in Indonesia Based on Portfolio Analysis of Boston Consulting Group Matrix”, which I now submit for examination for the title of BEng, is entirely my own work and has not been taken from the work of others, save and to the extent that such work has been cited and acknowledged within the text of my work.

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The work reported on in this thesis conforms to the principles and requirements of the University’s guidelines for ethics in research.

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Bogor, September 2016

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ABSTRACT

SEPTIAN VENTURA. Brand Engineering for Ferment Nation ID’s Hakko Kombucha Based on Portfolio Analysis of Boston Consulting Group Matrix. Supervised by LIEN HERLINA.

Brand has been a salient discipline to prevail a product/service in the growing industries, predominantly the one having greater share in market. This work identified the portfolio of a start-up business company – Ferment Nation ID, operating in West Java and Jakarta. Portfolio analysis was conducted using BCG Matrix and revealed that the company was lack of investment utilization. Thus, a simulation was conducted for the next period to identify its business units’ potency based on data obtained through interview. “Hakko” kombucha was identified as “Star”, while kefir mask and ice were “Question marks”. Branding strategy was developed for FNID’s kombucha using Customer Experience Management Framework. Questionnaires were spread to confirm the attributes and motives affecting consumer acceptance, which were foods promoting better digestion (43%) and immune system (43%) without preservatives (38%) and could help maintaining health (67%). This study identified the retail brand aspect and social environment in experiential world analysis. Company performed well for brand-related attributes (37% very well) and had relatively good company-customer relation (37% very well), concluding that the company has to focus more on customer-customer relation. The experiential world should be established on offline (salesperson, booth design, channel, activity) and online (social media and blog) platform.

Key words: Brand experience, Business unit, Portfolio analysis, Marketing

ABSTRAK

SEPTIAN VENTURA. Rekayasa Brand Hakko Kombucha dari Ferment Nation ID Berdasarkan Analisis Portofolio Menggunakan Boston Consulting Matrix. Dibimbing oleh LIEN HERLINA.

pengawet (38%) dan membantu memelihara kesehatan (67%). Studi ini mengidentifikasi aspek brand ritel dan lingkungan sosial dalam analisis dunia pengalaman. Perusahaan menunjukkan performa yang baik untuk aspek yang berkaitan dengan brand (37% sangat baik) dan relatif baik untuk hubungan perusahaan-pelanggan (37% sangat baik) sehingga disimpulkan bahwa perusahaan perlu berfokus lebih pada hubungan pelanggan-pelanggan. Dunia pengalaman harus dimunculkan pada platform luring (pramuniaga, desain stand, kanal, aktivitas) dan daring (media sosial dan blog).

Kata kunci: Brand experience, unit bisnis, analisis portofolio, strategi pemasaran.
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HAKKO KOMBUCHA IN INDONESIA BASED ON PORTFOLIO
ANALYSIS OF BOSTON CONSULTING GROUP MATRIX

SEPTIAN VENTURA

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at
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Hopefully, this work can provide further insights in implementing marketing science in the development of a company, especially start-up business; a case study in implementing strategic tool such as BCG Matrix in analyzing business units owned by a company; and ultimately will be promote the study of branding in TIN IPB itself.

Bogor, September 2016

Septian Ventura
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GLOSSARY

BCG Matrix : Boston Consulting Group Matrix or the Growth-share matrix, a matrix to help company to analyze its business units and to allocate its resources (Reeves et al. 2014).

Brand engineering : A systematic process of developing brand, issue, or corporate positioning (Weiner 2015).

FNID : Ferment Nation ID, a start-up business company; This research’s subject.

Portfolio : Refers to product portfolio, the range of items sold by a business.

SBU : Strategic business unit, refers to the product which is considered as most potential based on BCG Matrix result.

Start-up : An organization formed to search for a repeatable and scalable business model (Blank and Dorf 2012), and has high growth potential (U.S. Small Business Administration).
INTRODUCTION

Research Background

Start-up businesses are emerging in Indonesia, especially in food and beverages industries. Data from *Badan Pusat Statistik* Indonesia (2015) shows the number of micro- and small enterprises in foods and beverages industries grew 29.98% from 2014. With their relatively low capital and high competition market, a challenge arose for them to anchor their value into customers’ mind as customers’ perspectives strongly influence brand performance including market share and expansion success (Verhoef et al. 2009). Brand is the intangible yet visceral impact of an individual’s personal experience with the product, which delivers messages – company’s vision and culture, to customer (Mootee 2013).

The study of brand experience has caught the interest of researcher in its relevance to marketing science and brand engineering (e.g. Lemon and Verhoef 2016; Verhoef et al. 2009), while contributing to providing customer insights in multiple disciplines (Schmitt 2011). Brand experience is more important in a start-up business, than just a brand image (e.g. Damen et al. 2015; Meshreki and Mourad 2015). For this reason, an “engineering” process to explore brand experience is essential. As the paucity of brand engineering definition, Mark Weiner from Prime Research (2015) defined it as “A systematic, target audience-based process of developing brand, issue, or corporate positioning”, an act of implementing branding science through research with an aim to provide useful insight for better brand decision-making.

At any rate, a company has to identify its product’s potency, which one is prospective and consumes investment effectively. Through times, BCG Matrix – a portfolio analysis tool, has even been a stronger tool to facilitate companies in exploring its business unit, note with improvements (Reeves et al. 2014). Bruce Henderson (1970) stated “A company should have a portfolio of products with different growth rates and different market shares. The portfolio composition is a function of the balance between cash flows. Margins and cash generated are a function of market share.”, whilst “Brands move market share” (Mootee 2013).

This work itself is motivated by a strong interest to explore the prominence of product branding, considering how people these days are being attached to a particular brand and without any doubt could simply purchase products like Apple iPhone or Nike Shoes; moreover, they would be proud of using it and voluntarily promote the brand. Thus, a concept of brand engineering – a process of digging the insight and the strength of a brand and designing the strategies based on the imperatives and current issue, was proposed in this work in attempt to solve the problem and advancing the brand study to the next level.

Problem Statement

In Indonesia, start-up business has to face crowd and competitive market, especially in food and beverages industries, due to the encouragement of entrepreneurship in the past few years. Ferment Nation ID (referred to hereafter as FNID) is a start-business company. The company is substantially lack of portfolio
management as it has insufficient human resource. Start-up businesses mostly are established in capital-dearth setup and targeting niche market, from where companies will have to attract the investor or simply grow the customer in order to survive. Consequently, it necessitates the company to be able to identify its current portfolio and decide which to invest or divest, with respect to capital or endowments at hand. Furthermore, company has to communicate its identity – brand, for customer to distinguish the company and/or its product/service from another. FNID has created branding strategy for its product; however, it has yet to be assessed by means of effectivity and it also has little or no exploration of the branding strategy.

Research Objective

Based on the problems broken down from the motivation, this case study aims to solve the problem stated above with the objectives are:
1. to analyze the company’s portfolio and provide brief depiction of FNID’s product portfolio, and
2. to identify critical attributes in developing strategic business unit and improve the existing brand.

Research Benefit

The outputs of this research are specially addressed to FNID as the subject itself; which are brief description to company’s portfolio and brand improvement strategy for its business unit(s). Portfolio analysis is beneficial for company to identify its products’ potency and to decide the focus of investment. This research helps the company to reveal critical matter in developing its product and proposes a brand engineering concept in spicing up its brand. Brand engineering provides insightful strategy and focus for strengthening existing brand, especially related to niche marketing strategy. At the end, company is encouraged to exhibit a nature of brand experience to secure its market, to drive its market share larger and to create a sustainable relationship with customer and in between the customers themselves.

This research is expectantly beneficial for students and academics in learning market research, portfolio analysis and brand engineering as a whole process especially in Indonesia, as well as a case study employing BCG Matrix analysis. This work also provides comprehension to the advancement and recent studies on customer experience.

Scope of Research

This research focuses in fermented stuffs and organic market as the customization of BCG Matrix, with competitors presented were those identified during the work of this research. Portfolio analysis was conducted limited to briefly presenting company’s portfolio and which product is potential to develop. Branding strategy was developed using Customer Experience Management
(CEM) Framework which covers the analysis of experiential world of the customer (step 1) and the building of the experience platform (step 2).

In customer experience creation, there are eleven aspects from within and outside retail’s control acknowledged, those as presented in conceptual model of customer experience development proposed by Verhoef et al. (2009). In their work, there were five aspects deeply discussed: social environment, self-service technology, retail brand, customer experience dynamics and customer experience management strategy. This study explored the retail brand and social environment for the experiential world research. This work considered the study of interaction between customer and employee as irrelevant, regarding to the current circumstance of FNID having no salesperson in direct-selling channel. Hence, this study examined the interaction of customer-company and customer-customer. Integration of the insights into concepts at various touchpoint was carried out in the step of building experiential platform (step 2).

METHODOLOGY

This work involved a start-up business as a research subject in the case study in Indonesia. Tellis (1997) explained case study as an ideal methodology when investigating the selected one or two issues to understand the bigger system by using multiple source of data. This case study aimed to analyze a start-up business product portfolio and brand experience in practice. FNID was chosen as the research subject because it was one of rising start-up business in the campus area and having a great potential to grow rapidly, as it attained some awards related to entrepreneurship and technology and, while also was developed based on a structured approach of Customer Development in developing its product. To accomplish this brand research objectives, a methodology was designed in a structured research approach – brand engineering. Brand engineering as a whole process comprises the necessity to identify the company’s position in the market as start-up business at early stage has to utilize its investment effectively as well as to realize its market share vision. Then, brand as the highest asset of a company should be explored deeply in the experience approach to engage customer effectively and finally grows the customer itself.

Thereby, BCG Matrix was employed to accomplish the first objective of revealing the company’s product portfolio, by comparing the current position of each of the company’s business units to the market and the largest competitor. In this work, BCG Matrix was modified to properly conform to the setting of a start-up business. Based on the product portfolio, brand strategy was designed for the strategic business unit to complete the research objective of improving the existing brand. Research workflow diagram is shown in Figure 1.

Data Collecting

The data used is categorized into primary data and secondary data. Primary data collection was completed through direct interview to capable stakeholders in order to obtain the company profile, its product lines and products’ characteristics,
its production capacity and sales as well as competitors’ capacity and revenue reports. The competitors were the business owners of functional food and beverages industry, particularly the product and derivatives of kefir, kombucha and yoghurt, which were categorized in small, medium, or micro businesses. In this case, there were 10 industries identified residing in the area of West Java and Jakarta. The data of competitors’ capacity as well as the market growth were used to calculate the market size, while the company having largest capacity was considered as the largest competitor for the relative market share calculation. The unit of capacity was product (liter or gram) per duration (week or month). In the experiential world analysis, questionnaires were spread during several exhibitions or bazaar participated by FNID with a purposive sampling. Respondents were the people approached FNID’s booth before others (as there were several tenants with similar products in the event) to ensure that the response would be objective and uninfluenced by the others, regardless his/her knowledge about the product itself. After approaching the booth, respondents would be informed about the product by the employee (owner) and asked to taste it, then asked to fill the questionnaire. Questionnaires were made with a purpose to confirm the important characteristics and attributes for promoting healthy product, specifically functional food; while the sets of item were compared to related work with such topic in different marketplace (e.g. Kraus 2015; Siegrist et al. 2015).

The questionnaire was divided into 2 sections. First was regarding to brand performance (brand visual and its association to product) and service level (hospitality and adequacy of information provided); while the second contained customer expectation to product, regarding to: the perceived value of consumption, healthful properties (may choose more than 1 option) and food safety (fill in the blank). The questionnaire, as shown in Appendix 9, was written in Indonesian and used Likert scale (very poor 1 – 5 very well) for the first section to score customers’ experience after consumption of product. Meanwhile, descriptive choices were set for the second section. Item sets for section 2 were developed based on Kraus (2015), however was modified due to cultural difference as it affects consumer acceptance (Siegrist et al. 2015). Secondary data was obtained through report review on company’s production and industrial report. Secondary data includes the data of company’s capacity. Microsoft Excel 2016 was used for processing market data and generating BCG Matrix.

Boston Consulting Group (BCG) Matrix and Portfolio Analysis

Boston Consulting Group (BCG) Matrix is a concept proposed by Bruce Henderson from Boston Consulting Group to help in decision making for investment. Two factors serve as the basis of this concept; company competitiveness and market attractiveness, which is driven by relative market share and growth rate, respectively. The main idea was that market leadership as expressed through dominance in market share would result in sustainably superior returns. In long term view, this will lead to a self-reinforcing cost advantage through scale and experience to the point where competitors found difficulties to match. High growth rates in market indicated the most favorable for building this leadership.
Four quadrants of the prominent BCG Matrix are generated by the correlation of each driver’s condition and each. Low-growth, high-share products are “cash cows” that provides excess reinvestment to maintain share or build up another product, which typically are the high-growth, high-share “stars” with high future potential. High-growth, low-share “question marks” are products which should be carefully considered whether to be invested or discarded. Low-share, low-growth “pets” are essentially worthless products, but sometimes are maintained to comply with several causes.

**BCG Matrix Modification**

Primarily, BCG Matrix analysis was employed in a large company with multiple brands to carry on, where industries are not varied and differentiated as today. Present markets develop in rapid pace and unpredictable nature of change at most as the development of information technology is vast. Though BCG Matrix is still considerably effective to be employed with some concerns, it is necessary to improve the tool’s adaptability to the vast growing industry (Reeves
et al. 2014). BCG Matrix was employed in this research as the chosen company has relatively diversified range of product in research scale, which will prospectively own a balanced portfolio and is able to seize its opportunity, as described in The Product Portfolio by Henderson (1970).

Shoham and Paun (2015) in their study suggested a customization in the employment of BCG Matrix to small business marketing, which fit the current circumstance of subjected company as a start-up business. This suggestion is based on the facts, that 1) small company tends to have an insignificant relative market share, hence it cannot generate enough cash-flow to sustain its existence and in most case, divesting is the only option when employing BCG Matrix analysis, 2) assuming the validity of market-share’s relationship with profitability, which is linear, some small-businesses with low market-share by definition still can enjoy high level of performance, and 3) small business cannot simply compete against larger competitor as opposed the rule of economies of scale and scope, in which larger company has advantages in deriving the economies of scale and scope. Thus, it was concluded in their paper that modification of the strategic tools is imperative. Myllyla and Kaivo-oja (2015) also showed the excellence of BCG Matrix with integration to Delphi Method, suggesting the relevance of employing BCG Matrix with modification as strategic tools for portfolio analysis even in today’s vast industry growth. Accordingly, the matrix modification and integration to such relevant method comes to be essential.

There are several steps in business units’ analysis employing Boston Consulting Group (BCG) Matrix, those are selecting the unit, defining its market, calculating relative market share, finding out market growth rate and plotting the result in the matrix. Firstly, the information of business unit was obtained by interviewing the research subject. As resolved in Shoham and Paun (2015), this work modified the strategic tools by narrowing down the market definition in such sub-dimensions of: geographical emphasis, specifically in Jakarta and West Java; and product-line specification to organic stuffs. The period for calculating the growth of industry was set at 3-month basis, considering the vast industry growth today.

Market growth represents the attractiveness of an industry. In the matrix, it is divided into 2 areas of high- and low market growth. The mid-point (x-axis) of market growth, which separates the Star from Cow and Question Mark from Dog, was set as the growth rate of the industries and was estimated using the equation below; thus, it may also show whether the company or product is lagging behind- or keeping up with the industry (demand).

$$ Market \, Growth \, Rate = \frac{Market \, size \,(t) - \, Market \, size \,(t - 1)}{Market \, size \,(t - 1)} $$

The period t in sales and growth estimation is a 3-months duration, which are February 2015 – April 2016 (period 1), May 2016 – July 2016 (period 2) and August 2016 – October 2016 (period 3 for simulation), while market size is the total sales (including competitors) for a particular product in monetary terms. The growth of FNID was estimated to plot the company in the matrix using the following equation:

$$ Company \, growth = \frac{Sales \, in \, period \,(t)}{Sales \, in \, period \,(t - 1)} $$
Relative market share represents the competitiveness of research subject by means of production capacity, compared to its largest competitor of a particular product. Data of production capacity and growth were obtained by interview to business owners (competitors) and industrial report. As scarcity of data occurred, the volume of sales was obtained by the multiplication of price and capacity (as well the sales rate if available) based on interview result.

The final step is to plot the information into the matrix. To identify the company’s product portfolio, the subject should be compared to the largest competitor of a particular product. This will result the position in x-axis (relative market share), while company’s growth needs to be calculated to know its position in y-axis (market growth). Finally, the matrix would reveal the company’s portfolio and strategic imperatives could be developed based on the portfolio.

**Brand Exploration for Strategic Business Unit**

This stage is the essence of brand engineering; the process to dig out the potential of the brand itself and gain the insights to successfully prevail the brand in the target niche-market. Brand is the intangible yet visceral impact of an individual’s subjective experience with the product, which deliver messages to tell customers of what the company is doing (Mootee 2013). Brand management is essential to facilitate the product in promoting sustainable growth and building affiliation with the consumers to an extent of investing their resources to the product. Thus, brand also serves as a tool to tackle down other products with weaker identity as well as to defend against incoming attempts to bring down one’s product – to survive in competitive market.

In relevance to market share, Reuter (1993) expressed that financial brand equity is true in terms of exercising brand at commercial level: “Strong brands offer a greater potential to successfully defend their market share against the activity of competitors and new arrivals”. Brand equity as a key factor in determining corporate value suggests the prospect to extend market share through the leveraging and growth of the brand itself or through the development of line expansions (Kapferer 1997; Verlinden 1993). “Brands move market share” (Mootee 2013).

Brand experience has been an advance in marketing management approach, convinced by Lemon and Verhoef (2016) statement of “Creating strong customer experience is now a leading management objective”, whence brand experience appears to be a stronger predictor of actual purchasing behavior than brand personality (Brakus et al. 2009). Brand experience concept is an interconnected comprehension of the whole brand aspect. Schmitt (1999) revealed five types of experience marketing approaches (strategic experiential modules) a brand can create: sense (involving sensory perception), feel (involving affect and emotions), think (appeals to the intellect in order to deliver problem-solving experience), act (involving lifestyle, interactions and physical behavior), and relate (from connecting customer into a social context). In the progression of brand experience, Verhoun et al. (2009) explored the experiential marketing, describing brand experience involves the customer’s cognitive, affective, emotional, social and physical response to a particular brand. Experience is established through direct
engagement with customer (controllable elements such as service, retail visual, purchasing activity) as well as indirect contact (uncontrollable, mostly unplanned encounters such as reviews, criticism, influence of others/word-of-mouth).

Schmitt (2011) presented insights from previous research about experience touchpoints, which comprise 5 stages of customer engagement: discover (identifying products/services to meet wants and needs), evaluate (examining possible choices and comparing choice), acquire (spending more resources to shop), integrate (integrating the purchase into daily life) and extend (continuing relationship with the brand). Those experience touchpoints may occur at the phase of:

- Pre-purchase, from advertising, promotion, news and public relations.
- Purchase, from packaging, displays, store/shelf placements, salesperson and sales environments.
- Post-purchase, from package performance, customer service and loyalty programs.

Furthermore, Lemon and Verhouf (2016) explored customer experience as a sequential pattern, described as “Customer Journey”. Appendix 1 shows the process model of customer experience in each timeline consecutively forms a “journey”. There are four types of touchpoints: brand-owned, partner-owned, customer-owned and external/social, which a customer may interact in each stage of the experience. De haan et al. (2015) distinguished brand-owned and partner-owned touchpoints as firm-initiated, while customer-owned and external/social were customer-initiated.

Brand strategy was developed using brand experience approach, particularly by Customer Experience Management Framework as provided in Schmitt (2011) as a practical tool for managing experience. The CEM Framework used in this work is a simplified framework from Schmitt’s previous work in 2003. The framework consists of three basic steps: 1) analyzing the experiential world of the customer, 2) building the experience platform, and 3) implementing the experience in customer interfaces.

Experiential world research (step 1) – “customer insight”, is conducted by analyzing perspectives beyond the brand itself, the consumption and usage pattern of customers as well as the socio-cultural context that affects experiential needs and wants of customer (Schmitt 2011). The next step is building the platform to implement the experience with a solid concept to successfully convey the value and company’s vision. Experiential platform depicts the desired experience (“experiential positioning”) and customer expectation (“experiential value promise”). Finally, the concept has to be implemented in customer interfaces with continuous development basis (step 3). The experience project should be managed over time and internalized into every element in the organizational structure and process. Hence, companies have to manage its human resource to successfully deliver the concept into customer experience. This work provides limited to the strategies that the company may execute while the implementation (step 3) itself lies at company’s hand.
RESULT AND DISCUSSION

Identification of Ferment Nation ID

Interview to the company’s founder and CFO revealed the company profile in order to apprehend the setup in this case study of a food-and-beverages start-up business in Indonesia. Ferment Nation ID is a start-up business striving to promote healthy-being at most by the benefits of fermented stuffs from local resources and to rally the image of fermented stuffs. Its missions are to develop products without chemical additives (preservatives, coloring agent, sweetener and artificial flavor), to educate societies to have a better lifestyle as well as committing to build an educative, eco-friendly, sustainable and exhibiting Indonesian signature start-up business. Founded by Aldrian Kuswadi and Eric Prasetya on February 2015, FNID is currently organized with the contribution from their campus colleagues to take the position of CFO and CMO.

FNID produces its product in a manual, weekly-batch system. FNID presently manages several business units such as kefir mask, kefir ice and kombucha, which were produced in a business incubator “Incubie” (Inkubator Bisnis IPB), Bogor. Kombucha is fermented-tea drink, positioned as functional foods and has benefits of (potential) probiotics, antioxidant, antimicrobial and lowering sugar-blood level. It is produced by the fermentation of tea (black and green tea) and value-added with the infuse from fruits or spices. Fermentation is undergone by *symbiotic colony of bacteria and yeast* (SCOBY). Kefir mask is a mask made from the production of kefir, giving the benefits of skin revitalization and organic acid. Kefir mask was produced as the trend of kefir mask in skin care was growing for its benefits. Kefir ice is produced from byproduct of each business unit, using the remaining kefir from kefir mask production, fruits and SCOBY from kombucha production. Kefir ice production was intended to achieve sustainable production where the company could utilize every unit in production process.

FNID mainly market its product by participating in exhibitions and bazaar, else by direct selling. Its participation in events significantly supported its product promotion and FNID benefited from the opportunities to penetrate prospective market and community. By March 2016, FNID has been an active member of KOI (*Komunitas Organik Indonesia*), a large community concerning the healthiness of the people throughout healthy consumptions. Therefore, FNID could market about 70% of each batch before the next batch. To improve its sales rate, FNID is currently in process to acquire the certification of food safety, which is licensing for Home-Industry Foods (*P-IRT*). It will broaden its market window such as retail opportunity (Kem Chicks, Michelle Organic Corner or Total) and quality assurance. FNID utilizes Instagram solely as social media platform to promote one of its product line. Up to now, FNID possesses assets worth IDR 7,190,500.00 in form of processing tools and equipment. FNID has also acquired IDR 9,350,000 worth endowments from various investors. This signifies the attractiveness of business growth exhibited by FNID.

However, the company is lacking management in the aspect of financial and production, such as uncertain SOP (Standard Operating Procedure) and exclusion
of managers’ salary in the cost structure. Thus, the company needs to restructure its financial aspect, as well the tool to help them in overviewing its business unit performance or product portfolio.

**Boston Consulting Group (BCG) Matrix Analysis**

Due to the fact of emerging product, high value of market growth was manifested. Figure 2 exhibits the portfolio of FNID for sales period of May 2016 – July 2016.

![BCG Matrix](image)

**Figure 2 Current Portfolio of Ferment Nation ID**

Interview to FNID’s CFO disclosed that company have decided to disinvest the product of kefir and kefir mask, while company began to utilize by-product of each business unit resulting kefir ice. Thus, the production of kefir mask declined whereas kefir ice raised as shown in Appendix 8. The result showed that kombucha was found at Question mark quadrant, a product which may be either potential or unpromising; anyhow consumes lot of cash as the being in high-growing market (compared to mid-point of 44.92% market growth). Kefir mask was identified as Dog, implying its worthlessness.

However, this study tried to identify the potency of FNID’s business units by projecting future produce if the company utilizes its idle funds entirely to production sector. While FNID could market all of its product though in a slow rate, the increase in capacity will lead to economies of scale and enabling the company to deal with high-demand contract. Hence, a simulation was performed for period 3 (August 2016 – October 2016). The simulation requires the data for next period capacity; therefore, an additional query about the next period plan for capacity of each competitor was incorporated in the interview to fulfill the gap. The simulation assumed that the available endowments will be expended on production equipment, thus increasing the production capacity to the targeted capacity of 105 liters/week as expressed during the interview to FNID. The simulation resulted a balanced portfolio composition, where kefir mask as well as kefir ice was identified as Question mark and kombucha arose to Star. Simulation
result (Figure 3) exhibited the sudden growth of FNID (kombucha 1,167%, kefir mask 4,700% and kefir mask 3,067%) due to the expenditure of investment to production sector. Growth rate of industry was 47.39% (slightly grew from 44.92%) as some companies expressed their capacity will remain the same for the next 3 months. This result discovered that FNID’s business units would have great potential by utilizing its investment and that its decision to disinvest kefir mask may be unsatisfying in the future, since kefir mask and kefir ice showed a notable potential. Nonetheless, this simulation result needs to be carefully concerned prior to the execution. The matrix exhibits growth boom since the projection assumed that FNID invests to the production of all business units and is able to market all products. In fact, the investment would take some time to be actually yielding the outcome (e.g. process of administration, equipment shipping or certification).

![Figure 3 Simulated BCG Matrix for Ferment Nation ID’s portfolio](image)

A Star generates income for company, but also consumes a lot of cash (e.g. promotion and advertising) to maintain its position. Meanwhile, Question Mark needs a proper strategy to successfully raise into Star else become Dog. FNID developed its kombucha using customer-centric approach. Currently it is being the most popular business unit among others and it calls for further brand study to spice up its toneless proceedings. As the simulation assumed that all products were sold, this research proposed further analysis for Star “Hakko” kombucha using CEM Framework to satisfy the assumption as well as to ensure the uses of the investment will be effective.

**Experiential World Analysis**

The next step is to explore the brand experience to creatively interact with the target niche market. As mentioned in the research scope, the experiential world analysis for “Hakko” kombucha encompasses the retail brand and social environment. Product knowledge serves as a basis to break down the context for retail branding. In the development of consumer studies, especially for functional foods, Kraus (2015) provided comprehensions to purchasing decisions from
product attributes and characteristics as well as the motives when purchasing foods. His study revealed that consumers prioritized safe, healthy and natural product in terms of quality-related attributes, while still concerning about pleasant taste. Consumers firstly seek expiry date and information on healthful properties on the packaging and label. Kraus’ study in Poland evidently showed strong interest from consumers to food functionality of promoting immune system and preventing certain cancer. Foods from dairy products, meat or bread (carrier) containing B vitamins, minerals or calcium (functional component) are most interesting for consumers. Siegrist et.al (2015) also supports the concern on base product (carrier) with willingness to buy, in which functional food carrier with healthy image (i.e. yoghurt) had better acceptance compared to hedonic image food carrier (i.e. chocolate). Pechmann and Catlin (2016) in marketing communications highlighted the functional health claims for an otherwise “unhealthy” carrier (e.g. antioxidants in ice cream) resulted reduce in consumption; may as well said as reduce in purchase, since it issued a goal conflict. A valid response regarding to taste should be identified, as well as the way to communicate the information so that customer will not experience bias at “moment of truth”. For instance, company would convey kombucha as “fermented drinks” instead of “fermented tea”; as customer-mind may have had a set of association of “tea” hence customer may disapprove the taste if kombucha has actually lost the “tea” sense.

Nevertheless, a factor of cross-cultural difference may apply in case of consumer acceptance. This is proven by the study of consumers’ willingness to buy functional foods in Germany and China (Siegrist et al. 2015), with results suggesting that “cultural factors play significant role in the acceptance of functional foods”. A study comparing brand performance in China and USA for a well-known brand also denoted a difference; however, the structure of brand performance remains similar across countries: comprehension, comparative advantage, interpersonal relations, history, preference and attachment (Lehmann et al. 2008).

In case of product-related measure, this work observed the factor of comprehension, comparative advantage and interpersonal relation instead of history, preference and attachment; as the last three constructs are fairly described as “evaluative”, which was contrast to current circumstance of a newly-established company.

A simple questionnaire was spread to briefly explore the comprehension of customer to the brand as well as to confirm the attributes and values affecting consumer acceptance. Sample obtained was 18 respondents (14 females, 4 males), which was limited due to several limitations. As in early stage of development, the brand was not ever heard before; nonetheless, company performed relatively well for brand-related attributes and satisfaction level as shown in Figure 4. However, a slight number of consumer responded very poor for motto, described as “unfamiliar/incomprehensive”. This put a concern for the company to consider its familiarity to customer, since motto acts as well to convey company’s message and its promise to customer.
Section 2 of the questionnaire identified the perceived value, health properties and food safety. Some item sets were restricted as consideration to cultural difference and were specified to product characteristic.

**Consumer Acceptance**

Result shows maintaining health (67%) is the main motive of a customer to consume this functional food, while the rest of customers (33%) were practically testing the product to find the distinction with other products. After receiving information about the product and tasting it, they expected to have better digestion system (43%) as well as better immune system (43%), while 14% of them took it as dietary consumption. This insight provides a rationale for company in promoting its product; how the company has to convince product benefit as well as prove its product benefit. In spite of that, company also has to concern on what consumer are anxious about; the addition of preservatives (38%), the addition of artificial sweetener (25%), related to organic-food issue (25%) and related to digestive issue (13%) were the issues impairing consumer acceptance.
Based on interview, it was found that FNID had several comparative advantages to other companies. FNID basically had 4 active organizers having higher-education background. Its products were developed based on scientific approach. These were to compare with other businessmen operating single-handedly and hobby-based; company should take this advantage to grow rapidly for initiation. Based on community discussion, it was found that FNID had relatively balanced taste for its kombucha, resulting to better suited for “curious” or “beginner” customer. Compared to other companies, FNID was consistently promoted the use of local or Indonesian commodities. However, there was no solid proof to customer orientation to “Hakko kombucha”. Regarding to interpersonal relation, FNID currently did not have any program or concern to social aspect promotion; while its main competitor did have such “low price, healthiness for all” notion in the promotion. Other also had “premium” positioning while promoting rare fruits in Indonesia at the same time.

Social environment comprises the interaction of a customer to surroundings, another customer both directly (in retail environment) and indirectly (virtual community/online setting). In direct environment, company may interact customer through (targeted) retail and event booth. As shown in Figure 6, company had relatively good performance to serve the customer. Hence, it is more compelling to focus on customer-customer relation. Yet, FNID had no mechanism to observe and manage the interaction. This was also applied to online setting, as FNID utilized no other but Instagram (263 followers per August 1st, 2016).

![Satisfaction Level](chart.png)

**Figure 6** Customer satisfaction to service provided

The experience platform incorporates a multi-dimensional representation of the desired experience and the detailing of the experiential value that the customer can believe. The platform includes the access to achieving desired experience (i.e. Puma’s case in Schmitt 2003), whereas physical features like location, channel, promotion or price interact significantly with customer (Grewal 2009) as well as atmospherics in online conduit impacts the decision-making process of the customer in myriad ways (Puccinelli et al. 2009). Therefore, the experience platform in this research was divided to the platform of offline and online. In offline platform, experience may be triggered by *salesperson, booth design,*
channel (retailer or distributor) and activity by firm. Based on experiential world analysis, a world of context should be manifested. Company has to successfully accentuate the experience of its product. FNID developed variants of kombucha from fruits and spice. As being company’s value, it should be emphasized in a context and association to improve the experience. Original product: green tea and black tea may have better association of natural. Variant of pineapple can be attributed as refreshing, replenishing or fizzy as its taste character and associated to such condition of hydration or needs to refresh. Dragon fruit variant is advantageous for its energetic color and be best associated with active or sports. The variant from ginger gives warm, relaxing sensation and can greatly promoted for resting time or “end-of-day”. This feel/emotional attributes should also be implemented to salesperson, visually and behaviorally. As FNID had no visual “dress code” of salesperson, it may start to consider its importance for fulfilling detail experiential world needs. This as well applied to booth design as FNID has to visually provide the nuance of its culture.

FNID has targeted retailers such as Michelle Organic Corner and Kem Chicks, which expectantly will greatly contribute to company sales and awareness. In addition, another channel should be considered such as yoga health club; which was identified as being closely-related-attributes, health-promoting channel. The company needs to provide particular taste to even cope with the character of yoga, e.g. inner peace, relaxing, natural, self-purification (Mishra et al. 2012), soft or feminine. These also can enhance the feel or emotional experience of the customer. Furthermore, company is encouraged to exercise a creative business model. For example, integrating yoga membership program with the product or related to activity, company may hold a public yoga event collaborating particular yoga club; creating value for both the company and the partner/retailer thus strengthening the relation- and building the experiential world of B2B, B2C and especially C2C. Involving customer with such activity or program can effectively trigger the act experience.

Online platform includes the utilization of company’s web (blog) and social media. A social media marketing industry report (2016) by Stelzner reveals that 90% of marketers agreed on the importance of Social Media Marketing (SMM), those of who benefiting from SMM for increased exposure (89%) and increased traffic (75%), as well as developed loyal fans (68%). The report says blogging was the most important content (38%), followed by visual content (37%) and videos (21%). Having said the importance, may as well prevalence of SMM, the relation of social media activities and buying decision should be put on consideration. Pradiptarini (2011) observed the effectiveness of SMM and revealed that despite Generation Y has been the main user of social media, they are not necessarily the main audience of the SMM; only 1% were strongly affected- and 20% somewhat affected by the influence of social media sites activities/membership to purchase decision. SMM then should focus on content quality, trustworthiness and integration with another marketing platform. Dobele et al. (2015) underlined the importance of 7C’s of blogging, the proposed model consists of context, culture, content, connectivity, community and co-creation. Quality-content should be built in a context consistently over time, reflecting the company culture. Content (product, events/activities, networking) or features should also be differentiated on each media (Pradiptarini 2011). Product image or
events may be best served in social media such as Instagram or Facebook, while educational information or purchasing would better be featured in company’s web/blog. It is necessary to differentiate the features in social media so that the company can manage and evaluate the customer experience easily in each platform.

Effective branding should bring company’s culture and vision into the context. FNID’s vision of promoting value of fermented stuffs should be grounded in the context, not simply advertising the healthy value but the “art” of fermentation and awareness to its process as well. Its value of non-additives would be successfully conveyed by representing it in the packaging design, such as particular labeling or such depiction in the design itself. As customer seek for information, the easiness to acquire information will improve customer experience. Promotion of Indonesian commodity as the raw material will be an advantage; and it can be integrated in the content either to inform or educate customer through its history or benefits of the raw material used. These actions can stimulate the intellectual experience of the customer.

Cultures and visions have to be delivered on every channel in the same way, evoking FNID to strictly permeate its culture at most to employees. An investment to social media staff is also prominent in case of ensuring responsive service and connectivity to the customer or virtual community. This in return, is expected to create a communication with the virtual community and positive interaction between customer; possibly to build a co-creation model which may promote better experience. Certainly, community development can improve the relate experience of the customer with the product. Additionally, FNID is suggested to maximize its effort in implementing brand experience strategy especially during good economies as Kumar et. al (2014) revealed that experiences impact more in better economy and customer are less (more) price sensitive and focus more (less) on satisfaction of service – the experience, in better (worse) economy.

CLOSING

Conclusion

This work identified Ferment Nation ID (FNID) – a start-up business promoting fermented stuffs positioned as functional foods, which is having 3 business units of kefir mask, kefir ice and kombucha. BCG Matrix was modified by narrowing market definition, limiting market range into Jakarta and West Java and setting growth rate as the market growth mid-point. This modification is considerably proper for niche marketing strategy. Result revealed that FNID was lack of portfolio health. A simulation of investing the capital into production capacity revealed that FNID has a great potential for its Star “Hakko” kombucha and investment into Question marks kefir-based product should be considered.

The CEM Framework helped to identify the experiential world and provided a baseline to implement experience strategy. Experiential world analysis could present the gap which company has to satisfy, such as the retail brand including customer comprehension, comparative advantage and interpersonal relations; and
social environment including the interaction between customer to surroundings in online and offline platform.

Building experience platform, either in offline or online platform, should incorporate company’s vision and culture. In offline platform, visual design should be managed to improve the sense and feel of customer. Company’s vision can be successfully conveyed through integrated acts, from investing to employee’s training and decoration; selecting proper marketplace regarding to the nuance; to associating its product to a certain attribute. Furthermore, FNID needs to consider the advantage of expanding its network to related product-association such as yoga club as well as program co-operation. Building online platform can be supported by employing the 7C’s framework to improve the customer experience.

**Future Work Proposed**

In the portfolio analysis, further research may include the risk analysis of the investment, hence the company would have a better determination of its decision. Also, FNID may consider to take longer period to explicate BCG Matrix result as this work assumed that 100% produces were sold and at maximum capacity, as well as for competitor’s produces; this was due to private information constraint. Sales pattern can be integrated to give a more accurate calculation.

Due to limitation of this research, future research may seek for quantitative measure to the implementation of the strategies, to validate the impact of implementing brand experience to brand equity.

**REFERENCES**


Appendix 1  Customer journey process model (Lemon and Verhoef 2016)
Appendix 2 Customer experience creation conceptual model (Verhoef et al. 2009)
Appendix 3 Total investment needed for period-3 simulation

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity (Unit)</th>
<th>Price (IDR)</th>
<th>Total (IDR)</th>
<th>Economic life (year)</th>
<th>Depreciation/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass vessel</td>
<td>7</td>
<td>385,000</td>
<td>2,695,000</td>
<td>2</td>
<td>112,292</td>
</tr>
<tr>
<td>(Oxone)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass vessel 10L</td>
<td>3</td>
<td>100,000</td>
<td>300,000</td>
<td>2</td>
<td>12,500</td>
</tr>
<tr>
<td>Glass vessel 3L</td>
<td>4</td>
<td>15,000</td>
<td>60,000</td>
<td>2</td>
<td>2,500</td>
</tr>
<tr>
<td>Glass vessel 5L</td>
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<td>50,000</td>
<td>50,000</td>
<td>2</td>
<td>2,083</td>
</tr>
<tr>
<td>Glass vessel 15L</td>
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<td>125,000</td>
<td>125,000</td>
<td>2</td>
<td>5,208</td>
</tr>
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<td>Weigh</td>
<td>1</td>
<td>60,000</td>
<td>60,000</td>
<td>4</td>
<td>1,250</td>
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<td>Water dispenser</td>
<td>1</td>
<td>300,000</td>
<td>300,000</td>
<td>5</td>
<td>5,000</td>
</tr>
<tr>
<td>Pan</td>
<td>2</td>
<td>30,000</td>
<td>60,000</td>
<td>3</td>
<td>1,667</td>
</tr>
<tr>
<td>Filter</td>
<td>1</td>
<td>5,000</td>
<td>5,000</td>
<td>1</td>
<td>417</td>
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<tr>
<td>Measuring cup</td>
<td>2</td>
<td>100,000</td>
<td>200,000</td>
<td>2</td>
<td>8,333</td>
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<td>Refrigerator</td>
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<td>2,282,500</td>
<td>2,282,500</td>
<td>2</td>
<td>95,104</td>
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<td>Freezer 100L</td>
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<td>2,400,000</td>
<td>2,400,000</td>
<td>5</td>
<td>40,000</td>
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<tr>
<td>Showcase 250 L</td>
<td>1</td>
<td>3,400,000</td>
<td>3,400,000</td>
<td>5</td>
<td>56,667</td>
</tr>
<tr>
<td>Fermenter 50 L</td>
<td>1</td>
<td>2,925,000</td>
<td>2,925,000</td>
<td>5</td>
<td>48,750</td>
</tr>
<tr>
<td>Kefir starter</td>
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<td>200,000</td>
<td>200,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kombucha starter</td>
<td>1</td>
<td>300,000</td>
<td>300,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15,362,500</td>
</tr>
</tbody>
</table>

The company have owned all except fermenter of 50L, freezer 100L and showcase 250L, while it currently has IDR 9,350,000 idling at hand.

Appendix 4 Cost of goods manufactured of each variant

<table>
<thead>
<tr>
<th>Variants</th>
<th>Raw material cost (IDR)</th>
<th>Overhead cost (IDR)</th>
<th>Labor cost (IDR)</th>
<th>Total unit</th>
<th>Total cost (IDR)</th>
<th>Total cost (IDR)</th>
<th>COGM (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kombucha Black Tea</td>
<td>1,338,021.05</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>304</td>
<td>4,720,878.20</td>
<td>15,529.20</td>
<td></td>
</tr>
<tr>
<td>Kombucha Green Tea</td>
<td>1,393,221.05</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>304</td>
<td>4,776,078.20</td>
<td>15,710.78</td>
<td></td>
</tr>
<tr>
<td>Kombucha Ginger</td>
<td>1,064,115.79</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>216</td>
<td>4,446,972.93</td>
<td>20,587.84</td>
<td></td>
</tr>
<tr>
<td>Kombucha Dragon Fruit</td>
<td>1,588,021.05</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>304</td>
<td>4,970,878.20</td>
<td>16,351.57</td>
<td></td>
</tr>
<tr>
<td>Kombucha Pineapple</td>
<td>2,271,031.58</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>432</td>
<td>5,653,888.20</td>
<td>13,087.71</td>
<td></td>
</tr>
<tr>
<td>Kefir Mask</td>
<td>1,760.74</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>401</td>
<td>5,223,967.14</td>
<td>13,027.35</td>
<td></td>
</tr>
<tr>
<td>Kefir Ice</td>
<td>907.95</td>
<td>97,142.86</td>
<td>3,285,714.29</td>
<td>1,052</td>
<td>4,531,917.14</td>
<td>4,307.91</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 5  Production capacity in 1-month basis and pricing

<table>
<thead>
<tr>
<th>Product</th>
<th>Quantity (unit)</th>
<th>HPP (IDR)</th>
<th>Selling price (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kefir Mask</td>
<td>304</td>
<td>15,529.20</td>
<td>20,000.00</td>
</tr>
<tr>
<td>Kombucha Black Tea</td>
<td>304</td>
<td>15,710.78</td>
<td>20,000.00</td>
</tr>
<tr>
<td>Kombucha Ginger</td>
<td>216</td>
<td>20,587.84</td>
<td>25,000.00</td>
</tr>
<tr>
<td>Kombucha Dragon Fruit</td>
<td>304</td>
<td>16,351.57</td>
<td>25,000.00</td>
</tr>
<tr>
<td>Kombucha Pineapple</td>
<td>432</td>
<td>13,087.71</td>
<td>25,000.00</td>
</tr>
<tr>
<td>Kefir Mask</td>
<td>401</td>
<td>13,027.35</td>
<td>15,000.00</td>
</tr>
<tr>
<td>Kefir Ice Dragon Fruit</td>
<td>448</td>
<td>4,307.91</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Kefir Ice Pineapple</td>
<td>604</td>
<td>4,307.91</td>
<td>5,000.00</td>
</tr>
</tbody>
</table>

Appendix 6  Market data of share and growth of FNID’s current portfolio

<table>
<thead>
<tr>
<th>Products</th>
<th>Capacity</th>
<th>Competitor’s Capacity</th>
<th>Market Volume</th>
<th>Market Share</th>
<th>MS of Largest Competitor</th>
<th>Relative Market Share</th>
<th>Market Growth</th>
<th>Revenue (*IDR 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kefir Mask</td>
<td>0.5</td>
<td>40.0</td>
<td>200</td>
<td>0%</td>
<td>20%</td>
<td>1%</td>
<td>-60%</td>
<td>2,500</td>
</tr>
<tr>
<td>Kombucha</td>
<td>16.0</td>
<td>150.0</td>
<td>331</td>
<td>5%</td>
<td>45%</td>
<td>11%</td>
<td>77%</td>
<td>11,937</td>
</tr>
<tr>
<td>Kefir Ice</td>
<td>1.5</td>
<td>8.4</td>
<td>150</td>
<td>1%</td>
<td>6%</td>
<td>18%</td>
<td>-</td>
<td>360</td>
</tr>
</tbody>
</table>

Kefir ice has no growth since it has not been produced in the previous period.

Appendix 7  Data for period-3 simulation

<table>
<thead>
<tr>
<th>Products</th>
<th>Capacity</th>
<th>Competitor’s Capacity</th>
<th>Market Volume</th>
<th>Market Share</th>
<th>MS of Largest Competitor</th>
<th>Relative Market Share</th>
<th>Market Growth</th>
<th>Revenue (*IDR 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kefir Mask</td>
<td>24.0</td>
<td>60.0</td>
<td>270</td>
<td>9%</td>
<td>22%</td>
<td>40%</td>
<td>4,700%</td>
<td>48,000</td>
</tr>
<tr>
<td>Kombucha</td>
<td>105.0</td>
<td>150.0</td>
<td>430</td>
<td>24%</td>
<td>35%</td>
<td>70%</td>
<td>1,167%</td>
<td>151,200</td>
</tr>
<tr>
<td>Kefir Ice</td>
<td>19.0</td>
<td>50.0</td>
<td>200</td>
<td>10%</td>
<td>25%</td>
<td>38%</td>
<td>3,067%</td>
<td>11,400</td>
</tr>
</tbody>
</table>

Period 1  February 2016 - April 2016
Period 2  May 2016 - July 2016
Period 3  August 2016 - October 2016
### Appendix 8  Revenue data of identified industries

<table>
<thead>
<tr>
<th>Product</th>
<th>Revenue (IDR)</th>
<th>Growth (P2)</th>
<th>Growth (P3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Period 1</td>
<td>Period 2</td>
<td>Period 3</td>
</tr>
<tr>
<td>A</td>
<td>54,000,000</td>
<td>9,000,000</td>
<td>99,000,000</td>
</tr>
<tr>
<td>B</td>
<td>62,000,000</td>
<td>194,400,000</td>
<td>194,400,000</td>
</tr>
<tr>
<td>C</td>
<td>16,800,000</td>
<td>66,600,000</td>
<td>66,600,000</td>
</tr>
<tr>
<td>D</td>
<td>6,741,000</td>
<td>1,937,000</td>
<td>151,200,000</td>
</tr>
<tr>
<td>E</td>
<td>60,000,000</td>
<td>80,000,000</td>
<td>120,000,000</td>
</tr>
<tr>
<td>F</td>
<td>21,600,000</td>
<td>43,200,000</td>
<td>57,600,000</td>
</tr>
<tr>
<td>G</td>
<td>2,500,000</td>
<td>1,000,000</td>
<td>8,000,000</td>
</tr>
<tr>
<td>H</td>
<td>-</td>
<td>60,000</td>
<td>1,400,000</td>
</tr>
<tr>
<td>I</td>
<td>6,000,000</td>
<td>36,000,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>J</td>
<td>5,200,000</td>
<td>5,200,000</td>
<td>8,800,000</td>
</tr>
</tbody>
</table>

| Total   | 384,841,000   | 557,697,000 | 822,000,000 |
| Growth rate | -          | 44.92%      | 47.39%      |
Hak cipta milik IPB (Institut Pertanian Bogor)

Bogor Agricultural University